

ABSTRACT

Sub A1 7 A positioner (20) for a disk drive (10) that includes a magnet assembly (52), a conductor assembly (54), and a control system (22) is provided herein. The magnet assembly (52) includes a pair of magnet arrays (56A) (56B) and a pair of spaced apart flux return plates (75A) (75B). The conductor assembly (54) includes a coil array (78). The coil array includes a first portion (84) and a second portion (86) that are positioned substantially perpendicular to a longitudinal axis (90) of an E-block (16). The control system (22) directs current to electrically excite the first and second portions (84) (86) to generate a first force F_1 and a second force F_2 which are (i) parallel to the longitudinal axis (90) of the E-block (16), and (ii) equal in magnitude and directionally opposite to better position a data transducer (50) on a target track (32) of a storage disk (28).

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